

## REMARKS

Claims 1-49 and 51-67 are pending and have been rejected by the Examiner. In view of the following remarks, Applicant respectfully requests reconsideration of the application.

### Rejections Under 35 U.S.C. §102

In section 1 of the Office Action, the Examiner rejected claims 1-49 and 51-67 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 4,658,370 to Erman et al. (*Erman*).

Applicant respectfully traverses.

*Erman* discloses a knowledge engineering tool used for building and interpreting a knowledge base having separate portions encoding control knowledge, factual knowledge, and judgmental rules (abstract). The tool is used to build complex knowledge systems requiring diagnosis, recommendation, selection, or classification of information (col. 4, ll. 26-30). The knowledge base is organized into distinct frames which include attributes that take on values describing class instances, class types, legal value hierarchies, and user-defined functions, which all encode factual knowledge (abstract). A disclosed embodiment is a Car Repair Advisor knowledge base that assists in the diagnosis and repair of cars (col. 7, ll. 23-34). A knowledge engineer inputs unstructured knowledge from human experts, technical manuals, and other sources into the knowledge base (col. 5, line 68-col. 6, line 4).

Claim 1 recites "a contact center configured to receive said communications." The Examiner stated that *Erman* discloses this limitation in the abstract and FIGS. 1 & 2. However, the abstract discloses a tool for building and interpreting a knowledge base, and does not teach or disclose a contact center configured to receive communications. FIG. 1 of the reference shows the knowledge engineering tool loaded in a computer, and FIG. 2 shows a block diagram of

modules or subroutines of the knowledge engineering tool (col. 6, ll. 52-65). Neither of these figures discloses a contact center configured to receive communications.

Claim 1 also recites “a decision engine configured to determine a priority code for each of said received communications.” The Examiner stated that *Erman* discloses this limitation in the abstract and FIGS. 1 & 2. However, as set forth above, the abstract and figures of *Erman* disclose a knowledge engineering tool, and do not teach or disclose a decision engine configured to determine a priority code for received communications. The knowledge engineering tool and the knowledge base of *Erman* do not receive communications, and do not determine a priority code for anything.

Claim 1 also recites “at least one queue configured to store prioritized communications in order of priority code.” The Examiner stated that *Erman* discloses this limitation in the abstract and FIGS. 1 & 2. The cited reference discloses a knowledge base that stores control knowledge, factual knowledge, and judgmental rules (abstract). The knowledge base of *Erman* does not include a queue configured to store prioritized communications in order of priority code.

*Erman* does not teach or disclose all of the limitations recited in claim 1. Applicant respectfully submits that claim 1 is not anticipated by *Erman* and is in condition for allowance. Claims 2-17 and 51-53 depend, directly or indirectly, from claim 1 and are therefore allowable for at least the same reasons.

The Examiner stated that *Erman* discloses each limitation of claims 18, 35, and 49 in the abstract and FIGS. 1 & 2. Claims 18, 35, and 49 are substantially similar to claim 1, and as set forth above, *Erman* does not teach or disclose all of the limitations of claim 1. Similarly, *Erman* does not teach or disclose all of the limitations recited in claims 18, 35, and 49. Applicant

respectfully submits that claims 18, 35, and 49 are not anticipated by *Erman* and are in condition for allowance. Claims 19-34 and 54-56 depend, directly or indirectly, from claim 18 and therefore are allowable for at least the same reasons. Claims 36-48 and 57-59 depend, directly or indirectly, from claim 35 and therefore are allowable for at least the same reasons. Claims 60 & 61 depend from claim 49, and therefore are allowable for at least the same reasons.

Claim 62 recites “a decision engine that determines priority codes for items, . . . and is capable of learning new priority criteria based on a relative importance of the items learned from an order in which an agent selected the items.” The Examiner stated that *Erman* discloses the limitations of claim 62 in the abstract and FIGS. 1 & 2. As set forth above, the cited reference discloses a knowledge engineering tool and a knowledge base. The knowledge engineering tool of *Erman* does not include a decision engine that determines priority codes for items and is capable of learning new priority criteria. *Erman* does not teach or disclose priority codes and priority criteria. *Erman* does not teach or disclose all of the limitations recited in claim 62. Applicants respectfully submit that claim 62 is not anticipated by *Erman* and is in condition for allowance.

Claims 63 & 64 recite “a contact center . . . a decision engine that determines a priority code for each of the items received . . . and at least one queue configured to store the items in order of the priority code.” The Examiner stated that *Erman* discloses all of the limitations of claims 63 & 64 in the abstract and FIGS. 1 & 2. As set forth above, the cited reference discloses a knowledge engineering tool and a knowledge base. The knowledge engineering tool of *Erman* does not include a decision engine that determines a priority code and does not include a queue

configured to store the items in order of priority code. Claims 63 & 64 further recite that the decision engine “is capable of learning new rules for prioritizing items based on positive and negative feedback.” <sup>11</sup> *Erman* does not disclose a decision engine capable of learning new rules for prioritizing items based on positive and negative feedback. <sup>11</sup> *Erman* does not teach or disclose all of the limitations of claims 63 & 64. Applicants respectfully submit that claims 63 & 64 are not anticipated by *Erman* and are in condition for allowance.

Claims 65 & 66 recite “automatically learning a new priority rule based on an order in which an agent selected items, . . . and automatically determining priority codes for the items using the new priority rule.” The Examiner stated that *Erman* discloses these limitations in the abstract and FIGS. 1 & 2. As set forth above, *Erman* discloses a knowledge engineering tool and a knowledge base. <sup>11</sup> The knowledge engineering tool does not learn a new priority rule and does not determine priority codes for items using the new priority rule. <sup>11</sup> The knowledge engineering tool does not prioritize anything. *Erman* does not teach or disclose all of the limitations of claims 65 & 66. Applicant respectfully submits that claims 65 & 66 are not anticipated by *Erman* and are in condition for allowance.

Claim 67 recites automatically learning a new priority rule . . . automatically determining priority codes for the items using the new priority rule . . . parsing the items . . . and storing the items prioritized in at least one queue according to the priority code.” The Examiner stated that *Erman* discloses these limitations in the abstract and FIGS. 1 & 2. As set forth above, *Erman* discloses a knowledge engineering tool and a knowledge base. <sup>11</sup> The knowledge engineering tool does not learn a new priority rule, does not determine priority codes for items using the new

priority rule, does not parse the items, and does not store the items prioritized in at least one queue according to the priority code. *Erman* discloses a parser that processes a knowledge base to generate a set of pointers to specific instances of objects that are created from definitions found in a knowledge base file (col. 18, ll. 46-52). By contrast, claim 67 recites, among other things, “parsing the items including analyzing text content . . . , analyzing voice content . . . , [and] analyzing natural language contents.” The parser of *Erman* does not parse items which are communications or tasks. *Erman* does not teach or disclose all of the limitations of claim 67. Applicant respectfully submits that claim 67 is not anticipated by *Erman* and is in condition for allowance.

In section 2 of the Office Action, the Examiner rejected claims 1-49 and 51-67 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,687,384 to Nagase (*Nagase*). Applicant respectfully traverses.

*Nagase* discloses a parsing system that applies grammatical rules to an input sentence. An analysis table unit stores analysis intermediate results, which include syntactic category information, and at least one of syntactic, semantic, and control attributes (abstract). The intermediate results may include information about subtrees that fully satisfy rules and subtrees that partially satisfy rules (col. 3, ll. 1-4). A subtree is a possible result of parsing a sentence (col. 19, ll. 8-15; FIGS. 29A & 29B). The parsing system may establish priority among subtrees with priority based on several different factors (col. 3, ll. 33-64).

Claim 1 recites “a contact center configured to receive said communications.” The Examiner stated that *Nagase* discloses this limitation in the abstract and FIGS. 1-3. However, the abstract discloses a parsing system for parsing an input sentence, and does not teach or

disclose a contact center configured to receive communications. FIGS. 1-3 each show a subject-of-analysis input unit that designates and inputs sentences or phrases to be analyzed (col. 5, ll. 54-55; col. 6, ll. 66-67). None of these figures discloses a contact center configured to receive communications.

Claim 1 also recites “a decision engine configured to determine a priority code for each of said received communications.” The Examiner stated that *Nagase* discloses this limitation in the abstract and FIGS. 1-3. However, as set forth above, the abstract and figures of *Nagase* disclose a parsing system, and do not teach or disclose a decision engine configured to determine a priority code for received communications. *Nagase* discloses that the parsing unit may decide ranking among candidates (subtrees) in accordance with predetermined criteria (col. 3, ll. 33-36); however, ranking possible parses for an input sentence does not teach or disclose a decision engine configured to determine a priority code for received communications as recited in claim 1.

Claim 1 also recites “at least one queue configured to store prioritized communications in order of priority code.” The Examiner stated that *Nagase* discloses this limitation in the abstract and FIGS. 1-3. The cited reference discloses an analysis table unit that stores intermediate results (abstract).<sup>1</sup> The analysis table unit of *Nagase* does not include a queue configured to store prioritized communications in order of priority code.

*Nagase* does not teach or disclose all of the limitations recited in claim 1. Applicant respectfully submits that claim 1 is not anticipated by *Nagase* and is in condition for allowance. Claims 2-17 and 51-53 depend, directly or indirectly, from claim 1 and are therefore allowable for at least the same reasons.

The Examiner stated that *Nagase* discloses each limitation of claims 18, 35, and 49 in the abstract and FIGS. 1-3. Claims 18, 35, and 49 are substantially similar to claim 1, and as set forth above, *Nagase* does not teach or disclose all of the limitations of claim 1. Similarly, *Nagase* does not teach or disclose all of the limitations recited in claims 18, 35, and 49. Applicant respectfully submits that claims 18, 35, and 49 are not anticipated by *Nagase* and are in condition for allowance. Claims 19-34 and 54-56 depend, directly or indirectly, from claim 18 and therefore are allowable for at least the same reasons. Claims 36-48 and 57-59 depend, directly or indirectly, from claim 35 and therefore are allowable for at least the same reasons. Claims 60 & 61 depend from claim 49, and therefore are allowable for at least the same reasons.

Claim 62 recites “a decision engine that determines priority codes for items, . . . and is capable of learning new priority criteria based on a relative importance of the items learned from an order in which an agent selected the items.” The Examiner stated that *Nagase* discloses the limitations of claim 62 in the abstract and FIGS. 1-3. As set forth above, the cited reference discloses a parsing system. The parsing system of *Nagase* does not include a decision engine that determines priority codes for items and is capable of learning new priority criteria. *Nagase* does not teach or disclose priority codes. *Nagase* does not teach or disclose all of the limitations recited in claim 62. Applicants respectfully submit that claim 62 is not anticipated by *Nagase* and is in condition for allowance.

Claims 63 & 64 recite “a contact center . . . a decision engine that determines a priority code for each of the items received . . . and at least one queue configured to store the items in order of the priority code.” The Examiner stated that *Nagase* discloses all of the limitations of

claims 63 & 64 in the abstract and FIGS. 1-3. As set forth above, the cited reference discloses a parsing system. (The parsing system of *Nagase* does not include a decision engine that determines a priority code and does not include a queue configured to store the items in order of priority code. \ Claims 63 & 64 further recite that the decision engine "is capable of learning new rules for prioritizing items based on positive and negative feedback." \ \ *Nagase* does not disclose a decision engine capable of learning new rules for prioritizing items based on positive and negative feedback. \ \ *Nagase* does not teach or disclose all of the limitations of claims 63 & 64. Applicants respectfully submit that claims 63 & 64 are not anticipated by *Nagase* and are in condition for allowance.

Claims 65 & 66 recite "automatically learning a new priority rule based on an order in which an agent selected items, . . . and automatically determining priority codes for the items using the new priority rule." The Examiner stated that *Nagase* discloses these limitations in the abstract and FIGS. 1-3. As set forth above, *Nagase* discloses a parsing system. The parsing system does not learn a new priority rule and does not determine priority codes for items using the new priority rule. \ \ *Nagase* does not teach or disclose all of the limitations of claims 65 & 66. Applicant respectfully submits that claims 65 & 66 are not anticipated by *Nagase* and are in condition for allowance.

Claim 67 recites automatically learning a new priority rule . . . automatically determining priority codes for the items using the new priority rule . . . parsing the items . . . and storing the items prioritized in at least one queue according to the priority code." The Examiner stated that *Nagase* discloses these limitations in the abstract and FIGS. 1-3. As set forth above, *Nagase*



~~It~~ discloses a parsing system. The parsing system does not learn a new priority rule, does not determine priority codes for items using the new priority rule, and does not store the items prioritized in at least one queue according to the priority code. <sup>11</sup> *Nagase* discloses a parser that parses input sentences according to grammatical rules. By contrast, claim 67 recites, among other things, “parsing the items including analyzing text content . . . , analyzing voice content . . . , [and] analyzing natural language contents.” <sup>11</sup> The parser of *Nagase* does not parse items which are communications or tasks. <sup>11</sup> *Nagase* does not teach or disclose all of the limitations of claim 67. Applicant respectfully submits that claim 67 is not anticipated by *Nagase* and is in condition for allowance.

In section 3 of the Office Action, the Examiner rejected claims 1-49 and 51-67 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,442,542 to Ramani et al. (*Ramani*). Applicant respectfully traverses.

*Ramani* discloses a diagnostic system for identifying faults in medical devices by analyzing a data file generated by the machine. The diagnostic system extracts a set of feature values from the data file. The set of feature values is analyzed by a fault detector which produces a candidate set of faults based on a trained set of feature values and corresponding weight values. The candidate set of faults is presented to a user with a recommended repair procedure. The diagnostic system includes a learning subsystem which automatically updates the plurality of trained data based on faulty condition information input by the user (abstract).

Claim 1 recites “a contact center configured to receive said communications.” The Examiner stated that *Ramani* discloses this limitation in the abstract and FIGS. 1-3. However, the abstract discloses a diagnostic system for identifying faults in which the input is a data file

from a machine, and does not teach or disclose a contact center configured to receive communications. FIG. 1 shows data files from an imaging machine as input to the diagnostic system. FIG. 2 shows steps for training the diagnostic system to learn from data files of a malfunctioning machine (col. 6, ll. 26-32). FIG. 3 shows steps performed by the diagnostic system in analysis mode, in which the diagnostic system receives data files from an imaging machine and extracts feature values from the data files to identify faults (col. 7, ll. 32-54). None of these figures discloses a contact center configured to receive communications.

Claim 1 also recites “a decision engine configured to determine a priority code for each of said received communications.” The Examiner stated that *Ramani* discloses this limitation in the abstract and FIGS. 1-3. However, as set forth above, the abstract and figures of *Ramani* disclose a diagnostic system for medical devices, and do not teach or disclose a decision engine configured to determine a priority code for received communications.

Claim 1 also recites “at least one queue configured to store prioritized communications in order of priority code.” The Examiner stated that *Ramani* discloses this limitation in the abstract and FIGS. 1-3. The cited reference discloses a rule base that includes rules to establish relationships among different fault types identified for different data files (col. 9, ll. 25-28) and a trained database containing data and rules used for diagnosing faults in an imaging device (col. 3, ll. 1-4). Neither the rule base nor the trained database of *Ramani* includes a queue configured to store prioritized communications in order of priority code.

*Ramani* does not teach or disclose all of the limitations recited in claim 1. Applicant respectfully submits that claim 1 is not anticipated by *Ramani* and is in condition for allowance. Claims 2-17 and 51-53 depend, directly or indirectly, from claim 1 and are therefore allowable for at least the same reasons.

The Examiner stated that *Ramani* discloses each limitation of claims 18, 35, and 49 in the abstract and FIGS. 1-3. Claims 18, 35, and 49 are substantially similar to claim 1, and as set forth above, *Ramani* does not teach or disclose all of the limitations of claim 1. Similarly, *Ramani* does not teach or disclose all of the limitations recited in claims 18, 35, and 49.<sup>17</sup> Applicant respectfully submits that claims 18, 35, and 49 are not anticipated by *Ramani* and are in condition for allowance. Claims 19-34 and 54-56 depend, directly or indirectly, from claim 18 and therefore are allowable for at least the same reasons. Claims 36-48 and 57-59 depend, directly or indirectly, from claim 35 and therefore are allowable for at least the same reasons. Claims 60 & 61 depend from claim 49, and therefore are allowable for at least the same reasons.

Claim 62 recites “a decision engine that determines priority codes for items, . . . and is capable of learning new priority criteria based on a relative importance of the items learned from an order in which an agent selected the items.” The Examiner stated that *Ramani* discloses the limitations of claim 62 in the abstract and FIGS. 1-3. As set forth above, the cited reference discloses a diagnostic system. The diagnostic system of *Ramani* does not include a decision engine that determines priority codes for items and is capable of learning new priority criteria. *Ramani* does not teach or disclose priority codes or priority criteria.<sup>18</sup> *Ramani* does not teach or disclose all of the limitations recited in claim 62. Applicants respectfully submit that claim 62 is not anticipated by *Ramani* and is in condition for allowance.

Claims 63 & 64 recite “a contact center . . . a decision engine that determines a priority code for each of the items received . . . and at least one queue configured to store the items in

order of the priority code.” The Examiner stated that *Ramani* discloses all of the limitations of claims 63 & 64 in the abstract and FIGS. 1-3. As set forth above, the cited reference discloses a diagnostic system. The diagnostic system of *Ramani* does not include a decision engine that determines a priority code and does not include a queue configured to store the items in order of priority code. Claims 63 & 64 further recite that the decision engine “is capable of learning new rules for prioritizing items based on positive and negative feedback.” *Ramani* discloses a learning subsystem that automatically updates trained data based on faulty condition input from a user (abstract), but does not disclose a decision engine capable of learning new rules for prioritizing items based on positive and negative feedback. *Ramani* does not teach or disclose all of the limitations of claims 63 & 64. Applicants respectfully submit that claims 63 & 64 are not anticipated by *Ramani* and are in condition for allowance.

Claims 65 & 66 recite “automatically learning a new priority rule based on an order in which an agent selected items, . . . and automatically determining priority codes for the items using the new priority rule.” The Examiner stated that *Ramani* discloses these limitations in the abstract and FIGS. 1-3. As set forth above, *Ramani* discloses a diagnostic system. The diagnostic system does not learn a new priority rule and does not determine priority codes for items using the new priority rule. *Ramani* does not teach or disclose all of the limitations of claims 65 & 66. Applicant respectfully submits that claims 65 & 66 are not anticipated by *Ramani* and are in condition for allowance.

Claim 67 recites automatically learning a new priority rule . . . automatically determining priority codes for the items using the new priority rule . . . parsing the items . . . and storing the

items prioritized in at least one queue according to the priority code.” The Examiner stated that *Ramani* discloses these limitations in the abstract and FIGS. 1-3. As set forth above, *Ramani* discloses a diagnostic system. The diagnostic system does not learn a new priority rule, does not determine priority codes for items using the new priority rule, and does not store the items prioritized in at least one queue according to the priority code. *Ramani* discloses a parser that receives data files from a malfunctioning machine and removes extraneous data from the files. The parser uses the extraneous data to generate an information file about the imaging machine. (col. 3, ll. 18-26). By contrast, claim 67 recites, among other things, “parsing the items including analyzing text content . . . , analyzing voice content . . . , [and] analyzing natural language contents.” The parser of *Ramani* does not parse items which are communications or tasks. *Ramani* does not teach or disclose all of the limitations of claim 67. Applicant respectfully submits that claim 67 is not anticipated by *Ramani* and is in condition for allowance.

## CONCLUSION

Based on the above remarks, Applicant believes that the rejections in the Office Action of March 13, 2003 are fully overcome, and that the application is in condition for allowance. If the Examiner has questions regarding this case he is invited to contact the Applicant's undersigned representative at the number given below.

Respectfully Submitted,

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